

WHAT IS CLAIMED IS:

1. An additive concentrate comprising:
an oil soluble hydrocarbyl poly(oxyalkylene) aminocarbamate having a number average molecular weight (M_n) in the range 600 to 10,000 with at least one basic nitrogen atom wherein the hydrocarbyl substituent contains 1-30 carbon atoms; and,

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Q17 an oil soluble hydrocarbyl amine of formula $R-NH_2$,
wherein R represents a group R' or a group $R'-CH_2-$,
wherein R' represents a hydrocarbyl group having a number average molecular weight (M_n) in the range 750 to 6,000.

2. The concentrate of Claim 1, in which the weight ratio of the hydrocarbyl poly(oxyalkylene) aminocarbamate to the hydrocarbyl amine of formula $R-NH_2$ is in the range 6:1 to 1:6.

3. The concentrate of Claim 1, in which R' represents a hydrocarbyl group having a number average molecular weight (M_n) in the range 900 to 3,000.

4. The concentrate of Claim 1, in which R' represents a polyalkenyl substituent.

5. The concentrate of Claim 1, in which R' represents a polyisobutenyl substituent.

6. The concentrate of Claim 1, further comprising an anti-corrosion additive.

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Q2 7. A gasoline composition comprising:

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a major amount of a gasoline suitable for use in a spark ignition engine; and,

a minor amount of additive concentrate comprising:

an oil soluble hydrocarbyl poly(oxyalkylene) aminocarbamate having a number average molecular weight (M_n) in the range 600 to 10,000 with at least one basic nitrogen atom wherein the hydrocarbyl substituent contains 1-30 carbon atoms; and,

an oil soluble hydrocarbyl amine of formula $R-NH_2$ wherein R represents a group R' or a group $R'-CH_2-$, wherein R' represents a hydrocarbyl group having a number average molecular weight (M_n) in the range 750 to 6,000.

8. The gasoline composition of claim 7 wherein the hydrocarbyl poly(oxyalkylene) aminocarbamate and the hydrocarbyl amine of formula $R-NH_2$ are present in a combined amount in the range 50 to 5,000 ppmw, based on total composition.

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9. The gasoline composition of claim 8 in which the weight ratio of the hydrocarbyl poly(oxyalkylene) aminocarbamate to the hydrocarbyl amine of formula $R-NH_2$ is in the range 6:1 to 1:6.

10. The gasoline composition of claim 9 in which R' represents a hydrocarbyl group having a number average molecular weight (M_n) in the range 900 to 3,000.

11. The gasoline composition of claim 10 in which R' represents a polyalkenyl substituent.

12. The gasoline composition of claim 10 in which R' represents a polyisobutenyl substituent.

13. A process for the preparation of a gasoline composition which comprises:

adding to gasoline an additive concentrate comprising:

an oil soluble hydrocarbyl poly(oxyalkylene) aminocarbamate having a number average molecular weight (M_n) in the range 600 to 10,000 with at least one basic nitrogen atom wherein the hydrocarbyl substituent contains 1-30 carbon atoms; and,

an oil soluble hydrocarbyl amine of formula $R-NH_2$, wherein R represents a group R' or a group $R'-CH_2-$, wherein R' represents a hydrocarbyl group having a number average molecular weight (M_n) in the range 750 to 6,000.

14. The process of Claim 13 in which the hydrocarbyl poly(oxyalkylene) aminocarbamate and the hydrocarbyl amine of formula $R-NH_2$ are present in a combined amount in the range 50 to 5,000 ppmw, based on total composition.

15. The process of Claim 13 in which the weight ratio of the hydrocarbyl poly(oxyalkylene) aminocarbamate to the hydrocarbyl amine of formula $R-NH_2$ is in the range 6:1 to 1:6.

16. The process of Claim 13 in which R' represents a polyalkenyl substituent.

17. The process of Claim 13 in which R' represents a polyisobutenyl substituent.

18. A method of operating a spark-ignition internal combustion engine which comprises introducing into the combustion chambers of said engine a gasoline composition comprising:

a major amount of a gasoline suitable for use in a spark ignition engine; and,

a minor amount of additive concentrate comprising:

an oil soluble hydrocarbyl poly(oxyalkylene) aminocarbamate having a number average molecular weight (M_n) in the range 600 to 10,000 with at least one basic nitrogen atom wherein the hydrocarbyl substituent contains 1-30 carbon atoms; and,

an oil soluble hydrocarbyl amine of formula $R-NH_2$ wherein R represents a group R' or a group $R'-CH_2-$, wherein R' represents a hydrocarbyl group having a number average molecular weight (M_n) in the range 750 to 6,000.

19. The method of Claim 18 in which the hydrocarbyl poly(oxyalkylene) aminocarbamate and the hydrocarbyl amine of formula $R-NH_2$ are present in a combined amount in the range 50 to 5,000 ppmw, based on total composition.

20. The method of Claim 18 in which the weight ratio of the hydrocarbyl poly(oxyalkylene) aminocarbamate to the hydrocarbyl amine of formula $R-NH_2$ is in the range 6:1 to 1:6.

21. The method of Claim 18 in which R' represents a polyalkenyl substituent.

22. The method of Claim 18 in which R' represents a polyisobutenyl substituent.

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